Native vegetation guide update includes climate considerations













Left to right, top to bottom: Common yarrow, fox sedge, rough blazing star, wild geranium, porcupine sedge and golden Alexanders are examples of Minnesota native plants used in conservation restorations and easements. Native vegetation plays a key role in sustaining wildlife habitat and boosting landscape resiliency. **Photo Credits:** BWSR

The Minnesota Board of Water and Soil Resources (BWSR) recently updated its guidelines for using native vegetation to successfully restore habitat and maximize the benefits of conservation projects.

The Native Vegetation Establishment and Enhancement Guidelines help natural resource professionals and landowners ensure that native plantings are high functioning to meet project goals. They cover topics such as how to avoid the introduction of invasive species; seed and plant source requirements; optimal planting dates; and planting guidance by project type.

"These guidelines reflect the collective knowledge of conservation professionals in Minnesota about the use of native vegetation and

help guide decision-making about effective vegetation installation and management," said Dan Shaw, BWSR senior ecologist and vegetation specialist. "Effective plant selection, establishment and management plays an essential role in the success of conservation projects."

Native plants are key to sustaining environmental and human health, providing wildlife habitat, and boosting landscape resiliency. Environmental benefits include reducing water and wind erosion, increasing water infiltration, enhancing soil health by supporting healthy microorganism populations, sequestering carbon via root systems, and stabilizing slopes. Native plant communities also provide wildlife habitat benefits such as offering food

sources and nesting opportunities for pollinators, birds and other animals.

The guidelines have been updated four times since they were developed in 2010, most recently in fall 2022. The final version published on BWSR's website incorporates feedback from local government staff members and other conservation partners, who were invited to review and provide input this fall. Shaw said the guidelines likely offer the most comprehensive state guidance available in the country, and will continue to be updated as new research and field experiences become available.

The latest edition includes new seed specifications, new information about climate considerations, and guidance related to forestry and other

emerging practices. Sixteen project-specific fact sheets provide detailed instruction related to individual practices. The 2022 edition is offered in an online format to increase user friendliness; each section can be downloaded and printed individually.

The guidelines outline specific situations in which non-native species can be used. For example, non-native perennial crops such as alfalfa or Kernza, hay crops and forage crops can be used to protect drinking water and improve soil health in agricultural settings. Nonnative cover crops can be used to prevent erosion and improve water quality, while cultivars of native species can be used in urban stormwater plantings to meet aesthetic goals.

In addition to providing guidance and assistance to

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—Dan Shaw, BWSR senior ecologist and vegetation specialist

local conservation staff, the guidelines strive to develop consistency among state agencies and programs. The guidelines apply to all BWSR programs with vegetation restoration components and are also used in programs run by partner organizations such as the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

Native vegetation and seed sources consistent with the guidelines are

required for all BWSR Clean Water Fund grant-related work, wetland mitigation and restorations, erosion and water management cost-share programs and pollinator habitat programs. The guidelines are used by BWSR and local government staff who oversee conservation easement programs such as the Reinvest in Minnesota (RIM) Reserve Program and the Minnesota Conservation

Reserve Enhancement Program (MN CREP). The updated guidelines provide expanded guidance about when non-native vegetation can be used for projects such as for plantings that are incorporated into agricultural systems where native species and wildlife may not be well suited. The guidelines also act as a companion to other BWSR technical information such as BWSR seed mixes, the Minnesota Wetland Restoration Guide and the Biodiversity and Pollinator Toolbox.

BWSR plans to host a Tech Talk training about the updated guidelines at 1 p.m. on Monday, Feb. 6, and will follow up later in 2023 with additional trainings. Check the <u>Tech Talks webpage</u> for updated information on how to join.



Native vegetation planted within a 64-acre wetland restoration in Andover provides habitat for pollinators and other wildlife. The site, once a golf course, now functions as a city park.